

Amendments to the Claims

Please enter the following amended set of claims.

10. (Previously Amended) A multi-layer printed wiring board having via holes, wherein the outer wirings include copper as an outer layer and an alkaline refractory metal layer between the copper layer and a thermosetting resin layer and the via holes have a copper layer adjacent the thermosetting resin layer, and made by the method comprising

(a) electrodepositing an alkaline refractory metal which can be dissolved in an acid etching solution on one surface of a copper foil;

(b) applying a thermosetting resin on the electrodeposited alkaline refractory metal of (a) and curing said resin to a semi-cured state, thereby producing a coated copper foil;

(c) bonding said coated copper foil of (b) to an inner layer board having inner wirings on one or both of the faces thereof, said thermosetting resin being laminated onto said inner layer board to form a multi-layer board;

(d) removing said copper foil from the multi-layer board of step (c) by etching with an alkaline etching solution; thereby leaving said alkaline refractory metal exposed;

(e) forming blind via holes in both the alkaline refractory metal and the thermosetting resin by directly irradiating said exposed alkaline refractory metal of (d) to remove the alkaline refractory metal and the thermosetting resin simultaneously with a CO₂ laser to form a multi-layer board in which via holes are formed; and

(f) forming outer wirings.

11. (Previously Added) A printed wiring board according to claim 10, wherein the outer wirings are formed by first electroless depositing copper and thereafter electrodepositing a copper layer on the multi-layer board of step (e) in which blind via holes are already formed, applying a photoresist on the copper layer and thereafter forming photoresist patterns, acid etching a part of the outer copper layer and the alkaline refractory metal, and removing the photoresist patterns.

12. (Currently Amended) A printed wiring board according to claim 10, wherein the outer wirings are formed by applying a photoresist on the multi-layer board of step (c) in which blind via holes are already formed and thereafter forming photoresist patterns, depositing copper wiring patterns with electroless and electrodeposition between the photoresist patterns, removing the photoresist ~~patterns~~, patterns and removing the alkaline refractory metal remaining between the photoresist patterns by acid etching.

13. (Previously Added) A printed wiring board according to claim 10, wherein said copper foil has a roughness (Rz) in the range of 0.5-15 μm on the face on which said alkaline refractory metal is electrodeposited.

14. (Previously Added) A printed wiring board according to claim 10, wherein the thickness of said copper foil is in a range of about 5-100 μm , and the thickness of the alkaline refractory metal layer is in a range of about 0.005-3.0 μm .

15. (Previously Added) A printed wiring board according to Claim 10, wherein said alkaline refractory metal is selected from the group consisting of tin, zinc, and tin alloy, zinc and nickel alloy, and tin and copper alloy.

16. (Previously Added) A printed wiring board according to Claim 10, wherein said copper foil of step (a) is electrodeposited copper foil or rolled copper foil.

17. (Previously Added) A printed wiring board according to claim 10, wherein a chromate layer is further provided on said alkaline refractory metal layer.

18. (Previously Added) A printed wiring board according to claim 10, wherein said thermosetting resin layer is a prepreg or a thermosetting resin film.

19. (Previously Added) A multi-layer printed wiring board having via holes and outer wirings on at least one outer surface of said board, wherein the outer wirings have two metal layers on a thermosetting resin layer, the outer of said layers being of copper and the second of said layers being of an alkaline refractory metal, said via holes having a layer of copper on said thermosetting resin.